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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/754,800

01/09/2004

Robert Henry Roche

1600

7590

05/19/2006

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EXAMINER

MEHMOOD, JENNIFER

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/754,800

Applicant(s)

ROCHE ET AL.

Examiner

Jennifer A. Mehmood

Art Unit

~~2636~~ 2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on amendments filed March 21, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the feature(s) canceled from the claim(s): intrusion event tree that reveals cause-effect relations, derivation of mathematical expressions...and factors of menaces, the generalized resolving logical equation, the resolver, security measures of active and passive protection...enclosing physical barriers around...installations, entrapping a trespasser, disabling tear gas, involving the guard troops, or opening of defensive fire therein. Responding in reflection or refraction by diffraction modes. Attenuation...occurred to a value not less than the dead band of ultrasonic transceivers, frontier of echelon L configured as the openwork spatial lattice, the layout chart, entrapments along the presumed routings, dead spots, frequency and bandwidth of ultrasound emission, S/N ratio, signal processing domain, frequency adjustment. equations...factors of menaces, failure probability, untruth propositions, and goal function. No new matter should be entered.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet **within the range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

### ***Claim Objections***

4. Claims 4-7, 9 and 10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative

only, and, cannot depend from any other multiple dependent claim. See MPEP § 608.01(n).

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-3, 5-7, and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The following terms and phrases in the claims were neither present nor defined in the original specification: Claim 1 – plotting the intrusion event tree that reveals cause-effect relations, derivation of mathematical expressions...and factors of menaces, the generalized resolving logical equation, the resolver, security measures of active and passive protection...enclosing physical barriers around...installations, entrapping a trespasser, disabling tear gas, involving the guard troops, or opening of defensive fire therein. Claim 2 – responding in reflection or refraction by diffraction modes. Claim 3 – attenuation...occurred to a value not less than the dead band of ultrasonic transceivers, frontier of echelon L is being configured as the openwork spatial lattice. Claim 5 – definition of the layout chart. Claim 6 - entrapments along the presumed routings, plotting the intrusion event tree.

Claim 7 – dead spots, frequency and bandwidth of ultrasound emission, S/N ratio, signal processing domain, frequency adjustment. Claim 9 – equations...factors of menaces, failure probability, untruth propositions, and goal function.

7. Claims 1-7, 9, and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not describe how to rate the size of each particular echelon. For example, does a computer rate the size of each echelon or is this performed by visual inspection? How is an event tree formed and a cause-effect relationship established? The claims describe derivation of mathematical expressions of the cause-effect events to verify a logical matrix and cause-effects relations and factors of menaces, but neither the drawings nor the specification depict any mathematical expressions. What is a factor of menace? What is a resolver in a control software algorithm? How are physical barriers, entrapping a trespasser, disabling tear gas and guard troops, or opening defensive fire facilitated from the generation of signals to start the aforementioned security measures? Neither the drawings nor the specification describe how the signals deploy an aforementioned security measures. Do diffraction modes consist of reflection and/or refraction? Is an intruder's edge (claim 2) the same as an intruder's surface (described in the specification)? Any "value not less than the dead band of the ultrasonic transceivers" is not described anywhere in the disclosure. Is figure 1 depicted as an open spatial lattice? Is figure 2 the layout chart?

Based on the drawings and specification, the examiner is unaware of the relevance of the following claim limitations: dead spots, frequency and bandwidth of ultrasound emission, S/N ratio, signal processing domain, and frequency adjustment. How is the ultrasound signal affected by the above limitations? In addition, the following limitations appear in the claims: equations...factors of menaces, failure probability, untruth propositions, and goal function. How is the ultrasound signal affected by the above claim limitations? How are prognosticated conditions of the ambient air around a protected object determined – human, machine?

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-7, 9, and 10 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

10. The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device.

11. Claims 1-7, 9, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Overall, the claim limitations are convoluted and jumbled. Examiner cannot discern the claim limitations – they do not present a clear and logical format. For example:

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12. Claim 1 recites the limitation "the remote ability", line 5.
13. Claim 1 recites the limitation "the dome-type volumetric room", lines 6 and 7.
14. Claim 1 recites the limitation "the spatial multi-echelon openwork structure", lines 10 and 11.
15. Claim 1 recites the limitation "the particular task", line 12.
16. Claim 1 recites the limitation "the central echelon", lines 12 and 13.

There is insufficient antecedent basis for these limitations in claim 1. In addition, examiner has discovered numerous claim limitations that lack antecedent basis in claims 2-7, 9, 10.

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Lee et al. (US 6,346,705), Piesinger (US 6,922,145), Mahler et al. (US 6,262,661), Dando (US 6,127,926), Buckley et al. (US 2005/0040947), and Payton et al. (US 6,885,303) disclose intrusion detection systems.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Stone whose telephone number is (571) 272.2976. The examiner can normally be reached 8:00-4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeffery Hofsass can be reached at (571) 272.2981. The fax phone

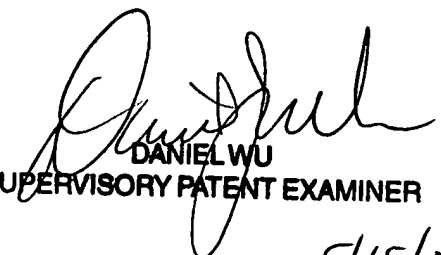


number for the organization where this application or proceeding is assigned is (571) 273.8300 for regular and after final communications.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272.2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Stone  
April 20, 2006

  
DANIEL WU  
SUPERVISORY PATENT EXAMINER  
5/15/06